AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1. (currently amended) ~~Laser~~ A laser device comprising:

[[-]] an optical pumping means (10)[[,]];

[[-]] an amplifying medium (2) excited by a laser beam (11) with a fundamental wavelength emitted by the optical pumping means, an output face (7) of the amplifying medium being cut according to the Brewster angle for said fundamental wavelength~~, and~~;

[[-]] a birefringent crystal (4) for frequency doubling, a crystalline axis "c" of said birefringent crystal forming an angle θ_c, the angle θ_c being not zero with respect to the orthogonal direction of the polarization of a fundamental wave of the laser beam, defined by the Brewster surface[[,]]; and

an isotropic medium (3) inserted between the output face (7) of the amplifying medium and an input face (8) of the birefringent crystal, wherein,

~~the~~ a refractive index of the isotropic medium is within 10% of the refractive index of the birefringent crystal, ~~and~~

the amplifying medium (2) and the birefringent crystal (4) are firmly attached to each other so as to constitute a monolithic resonant cavity, and

the isotropic medium is made from potassium tantalate ($KTaO_3$).

2. (currently amended) ~~Device~~ The laser device according to claim 1, ~~characterized in that~~ wherein the input face (8) of the birefringent crystal is cut according to a slight angle ε with respect to a normal to a direction of propagation (5) of the laser beam.

3. (currently amended) ~~Device~~ The laser device according to claim 1, ~~characterized in that~~ wherein the output face (9) of the birefringent crystal is cut according to a slight angle ε with respect to a normal to a direction of propagation (5) of the laser beam.

4. (currently amended) ~~Device~~ The laser device according to claim 2, ~~characterized in that~~ wherein the angle ε is less than or equal to one degree.

5. (currently amended) ~~Device~~ The laser device according to claim 1, ~~characterized in that~~ wherein a plane orthogonal to a direction of propagation of the fundamental wave

contains the crystalline axis "c", the plane forming another angle with respect to an axis "a" and an axis "b" of the birefringent crystal so as to obtain a phase matching at the operating temperature between the fundamental wave and a harmonic wave.

6. (currently amended) ~~Device~~ The laser device according to claim 1, ~~characterized in that~~ wherein the amplifying medium (2) is constituted by yttrium aluminium garnet (YAG) doped with neodymium (Nd).

7. (currently amended) ~~Device~~ The laser device according to claim 6, ~~characterized in that~~ wherein the amplifying medium (2) is a cylindrical crystal of YAG doped with Nd with an input face forming a plane mirror.

8. (currently amended) ~~Device~~ The laser device according to claim 1, ~~characterized in that~~ wherein the pumping means (10) is a laser diode.

9. (currently amended) ~~Device~~ The laser device according to claim 1, ~~characterized in that~~ wherein the birefringent crystal (4) is made from potassium niobate ($KNbO_3$).

10-13. (canceled)

14. (currently amended) ~~Device~~ The laser device according to claim 2, ~~characterized in that~~ wherein the output face (9) of the birefringent crystal is cut according to a slight angle ε with respect to the normal to the direction of propagation (5) of the laser beam.

15. (currently amended) ~~Device~~ The laser device according to claim 3, ~~characterized in that~~ wherein the angle ε is less than or equal to one degree.

16. (currently amended) ~~Device~~ The laser device according to claim 14, ~~characterized in that~~ wherein the angle ε is less than or equal to one degree.

17. (currently amended) ~~Laser~~ A laser device comprising:

an optical pumping means (10);

an amplifying medium (2) excited by a laser beam (11) with a fundamental wavelength emitted by the optical pumping means;

a frequency doubling birefringent crystal (4); and

an isotropic medium (3) inserted between a final output face (7) of the amplifying medium and an input face (8) of the birefringent crystal, wherein,

the final output face (7) of the amplifying medium toward the birefringent crystal is cut according to the Brewster angle for said fundamental wavelength,

the amplifying medium (2) and the birefringent crystal (4) are attached to each other so as to constitute a monolithic resonant cavity,

a crystalline axis "c" of the birefringent crystal forms a non-zero angle θ_c with respect to an orthogonal direction of the polarization of a fundamental wave of the laser beam, defined by the Brewster surface, ~~and~~

a refractive index of the isotropic medium is within 10% of a refractive index of the birefringent crystal, and

the isotropic medium (3) is constituted by potassium tantalate $KTaO_3$.

18. (canceled)

19. (currently amended) The laser device of claim 17, wherein,

the final output face (7) of the amplifying medium (2) is cut at the Brewster angle, the Brewster angle calculated from a first index n1 and from a second index n2 of the isotropic ~~crystal~~ medium (3), and

the amplifying medium and the isotropic ~~crystal~~ medium (3) are joined to each other on a portion of the final output face (7).

20. (previously presented) The laser device of claim 19, wherein,

a final output face (8) of the isotropic medium (3) is joined to the birefringent crystal (4),

the isotropic medium (3) and the birefringent crystal (4) have colinear geometrical axes and approximately identical diameter, and

an input face of the isotropic medium (3) is cut at the final output face (7) so that the laser beam (5) exiting from the amplifying medium (2) and deflected by the final output face (7) passes through the isotropic medium (3) and the birefringent crystal (4) parallel to their geometrical axes.